J, a) with a few protuberances (Fig. 4, J, b–d) or short spur-like branches (Fig. 4, J, e). Frequently when the axial tip (Fig. 4, K, a) yields to allow emergence of the individualized zoospores one (Fig. 4, K, e) or more of the lateral protrusions likewise gives way apically, so that discharge of the sporangium takes place through plural openings. In many instances some protrusions remain closed (Fig. 4, K, b–d). Where all protrusions remain closed, or where no protrusions are present, the zoospores necessarily are discharged from the single opening at the axial tip. After they have rounded up and encysted near the openings (Fig. 4, K, a, e) the zoospores commonly measure about 7.5μ in diameter.

The isolations from roots of spinach and flax thus agree satisfactorily with *Aphanomyces cladogamus* in the morphology of their sporangia and zoospores. They are held properly referable to that species more especially, however, because of close resemblances in their sexual reproductive apparatus—resemblances evident in all main dimensions, in the frequent monoclinous origin of reproductive units, and in the arrangement of the oogonium and its attendant antheridia as well as of the hyphae or branches supplying these organs.

LITERATURE CITED

Drechsler, C. *The beet water mold and several related root parasites.* Journ. Agr. Res. **38:** 309–361. 1929.

———. *Occurrence of a species of* Aphanomyces *on roots of spinach and flax.* (Abstract.) Phytopathology **25:** 14–15. 1935.

———. *Several species of* Pythium *peculiar in their sexual development.* Phytopathology **36:** 781–864. 1946.

Meurs, A. *Wortelrot, veroorzaakt door schimmels uit de geslachten* Pythium *Pringsheim en* Aphanomyces *de Bary:* 94 pp. Baarn, 1928.

ENTOMOLOGY.—*A new cryptine genus of economic interest (Hymenoptera: Ichneumonidae).* Luella M. Walkley, Entomology Research Branch, U. S. Department of Agriculture. (Communicated by C. F. W. Muesebeck.)

The new genus, described below, superficially resembles *Ischnus* Gravenhorst, 1829 (Ichn. Europaea **1:** 638) but may be readily separated from it by the shape of the ovipositor (Fig. 1, *a*, *b*), the shape of the male genital sheaths (fig. 1, *c*, *d*), and the lack, in both sexes, of a pale annulus on the antenna. Even more significant is the fact that it differs biologically since the only known species parasitizes sawflies, whereas all species of *Ischnus*, so far as is known, parasitize Lepidoptera, particularly the Olethreutidae.

Pseudischnus, n. gen.

Genotype: (*Ischnus oregonensis* Cushman) = *Pseudischnus oregonensis* (Cushman) n. comb.

Head broader than thorax, temples somewhat convex but sloping inward and about one-half as long as width of eye when viewed dorsally; clypeus about twice as wide as long and convex with a more or less truncate but slightly sinuate anterior margin; antennae without annulus.

Mesoscutum with notaulices sharp and distinct to at least its center; upper lateral margins of pronotum visible when viewed from above; propodeum with only the basal transverse carina distinct and complete, the apical carina broadly interrupted in the middle, the propodeal spiracle round in the male, slightly oval and larger in the female; female propodeum with the dorsal surface usually short or at least shorter than posterior surface and meeting the posterior surface at an angle of about 120 degrees; the male propodeum not differentiated into dorsal and posterior surfaces but gently sloping; petiole of female flat dorsally and strongly curved near or just before spiracles, the postpetiole fully three times as broad as base of petiole, with dorsolateral carinae becoming dorsal on the postpetiole and varying from strong and distinct to rather weak; petiole of male less curved and more slender with postpetiole scarcely twice as wide as base of petiole and with dorsolateral carinae indistinct or missing.

Areolet of forewing with sides convergent, the second intercubitus often indistinct and in some cases apparently missing, the areolet then being open.

Ovipositor sheaths about two-fifths length of abdomen; apex of ovipositor strongly curved dorsally, the point being not more than three times as long as broad at base (Fig. 1, *a*); male genital sheaths with the visible part very slender (Fig. 1, *c*).

Pseudischnus will key to *Ischnus*, couplet 29,

in Pratt's key to Nearctic genera of Cryptini (Pratt, Amer. Midl. Nat. **34** (3): 558–560. 1945). The second half of couplet 29 may be modified as follows making it referable to an additional couplet also given below:

29. ——
Propodeum with basal carina stronger than apical carina, the latter represented only laterally; propodeal spiracles circular 33
30. ——
31. ——
32. ——
33. Nervellus broken slightly below middle with anterior end farther from wing base than posterior end; base of petiole usually with lateral triangular projections..... *Ischnus*
Nervellus broken far below middle (at least at the posterior two-thirds) with anterior end closer to wing base than posterior end; base of petiole without lateral triangular projections..... *Pseudischnus*

In color and general conformation members of this new genus can be easily mistaken for *Ischnus*. Closer observation, however, shows that *Pseudischnus* has: (1) the petiole flatter in its basal two-thirds and more strongly bent with its spiracles closer to the apex; (2) the propodeum with an areola suggested, in the female, by the plane of the propodeum in that area, and in the male usually by a difference in sculpture in the area; (3) the mesoscutum at least as broad as long (in *Ischnus* it is longer than broad); (4) the pronotum less evident when viewed from above.

Ischnus as considered here is *Ischnus* of the genotype (*Ischnus inquisitorius* (Mueller)). However, all the species in the U. S. National Museum collection included in the genus have been studied. Some of the species, described and undescribed, agree with *Pseudischnus* in one or more of the characters discussed above but never in the shape of the ovipositor or of the genital sheaths.

The type series of *Pseudischnus oregonensis* (Cushman) contains specimens from Oregon and Montana reared from *Neodiprion tsugae* Middleton (Cushman, Journ. Washington Acad. Sci. **29** (9): 391–393. 1939). Later the species was found in Idaho and now specimens recently received from California extend the range southward. The California specimens were reared from *Neodiprion* sp., which is probably that previously identified as *Neodiprion tsugae* Middleton.

The species *oregonensis* varies in the extent of the pale coloring on the male though the general pattern is constant. The extent of reddish color on the propodeum of the female also varies. Some specimens have the areolet of the forewing incomplete or open; in fact, in some cases one forewing will have a closed areolet and the other an open one. The size, especially of the female, also varies somewhat, the smallest specimen in the collection of the U. S. National Museum being approximately 6 mm. long and the largest specimen about 8 mm. long.

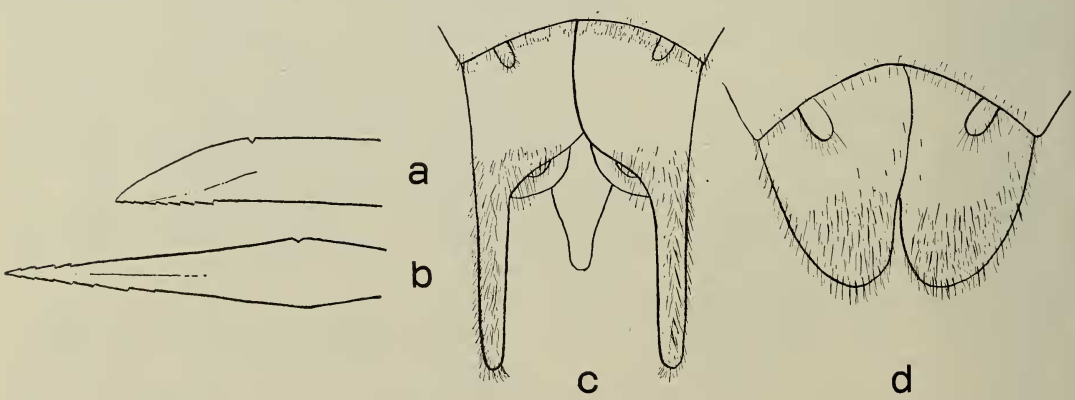

FIG. 1.—*a*, Apex of ovipositor of *Pseudischnus oregonensis* (Cushman), lateral view; *b*, apex of ovipositor of *Ischnus inquisitorius* (Mueller), lateral view; *c*, genital sheaths of *Pseudischnus oregonensis* (Cushman), dorsal view; *d*, genital sheaths of *Ischnus inquisitorius* (Mueller), dorsal view.